

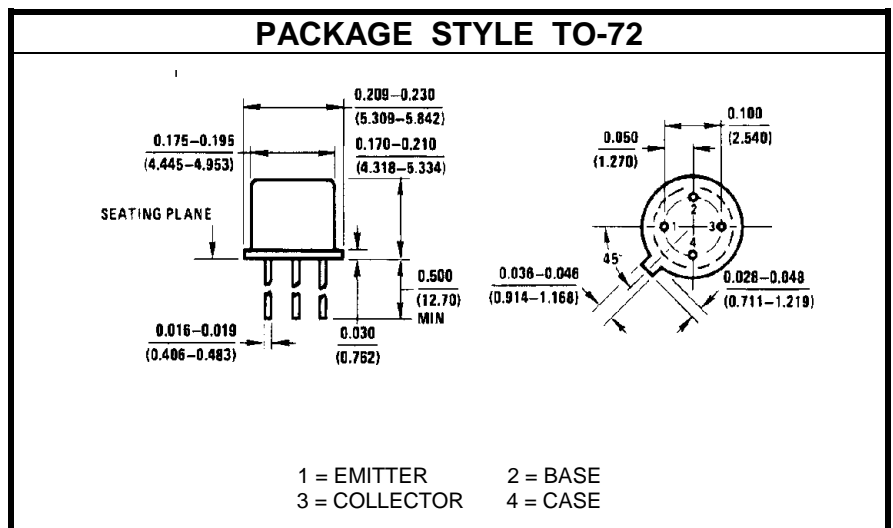
NPN SILICON HIGH FREQUENCY TRANSISTOR

DESCRIPTION:

The **MS175H** is Designed for High Frequency Low Noise Amplifier and Oscillator Applications.

MAXIMUM RATINGS

I_C	100 mA (PEAK)
V_{CE}	15 V
P_{DISS}	300 mW @ T _C = 25 °C 200 mW @ T _A = 25 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +200 °C


CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CEO}	I _C = 5.0 mA	15			V
BV_{CBO}	I _C = 10 μA	30			V
I_{CBO}	V _{CB} = 20 V T _A = 150 °C			0.01 1.0	μA
BV_{EBO}	I _E = 1.0 μA	2.0			V
h_{FE}	V _{CE} = 1.0 V I _C = 5.0 mA	40		150	---
V_{CE(SAT)}	I _C = 20 mA I _B = 2.0 mA			0.8	V
V_{BE(SAT)}	I _C = 20 mA I _B = 2.0 mA			1.0	V
f_t	V _{CE} = 10 V I _C = 5.0 mA f = 100 MHz	1500			MHz
C_{ob}	V _{CB} = 0 V f = 1.0 MHz V _{CB} = 10 V f = 1.0 MHz			3.0 1.0	pF
C_{ib}	V _{EB} = 0.5 V f = 1.0 MHz			3.0	pF
NF G_{pe}	V _{CE} = 6.0 V I _C = 1.5 mA f = 200 MHz	15	3.5	4.5	dB
P_o η	V _{CB} = 10 V I _E = 12 mA f = 500 MHz	30 25			mW %